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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,822	03/15/2004	Tatsuhiko Shibuya	372106-102A	1620

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EXAMINER

MOORE, MARGARET G

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,822

Applicant(s)

SHIBUYA ET AL.

Examiner

Margaret G. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 16, 21 to 29 is/are pending in the application.
- 4a) Of the above claim(s) 21 to 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 to 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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1. Applicant's election without traverse of Group I in the reply filed on 10/7/05 is acknowledged.

2. Claims 2, 3, 5 to 7, 9 and 12 to 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2:

Since claim 1 provides a definition of "first alkoxysilane" and "second alkoxysilane" by providing formula (I) and (II), it is confusing to try to refer to formula (III) as said first or said second alkoxysilane. It is unclear what exactly is embraced by this claim. Note that the remaining claims that depend thereon are indefinite too for this reason.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 to 12 and 14 to 16 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000-77399, as interpreted by the English language equivalent Yamada et al. and a machine generated English language translation.

JP 2000-77399 teaches silica porous membranes and method of making. Note the English language abstract which teaches a method in which a silica source is heated in an inert gas atmosphere.

For clarification of this method, please note the teachings of Yamada et al. Column 4, lines 45 and on, teaches the silanes of formula (I), (II) and (III). These are applied to a substrate and cured. Column 12 teaches an inert atmosphere having an oxygen concentration of no greater than 100 ppm. This meets the limitations of claims 1 and 2. See, for instance, Example 13 which meets the

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requirement of claim 3. For claim 4, see column 8, line 40. For claim 7, see column 12 which teaches an upper limit of 650° C. Column 11, lines 45 and on, teaches claims 8 and 9. Comp. Ex. 10 on column 25 meets claim 12. Example 1 demonstrates a process using nitrogen gas and various heating steps, meeting claims 14 to 16.

In the machine generated translation, note paragraph 8 on page 3 which teaches the weight average molecular weight requirement meeting claims 10 and 11. This also teaches the inert gas requirement and temperature requirements claimed. Paragraph 31 on page 9 teaches the claimed oxygen content. Paragraph 21 on page 6 teaches formula (I) and (II) while paragraph 39 teaches a combination of (I), (II) and (III).

For claims 6 and 7, these properties will inherently be present in the method and film of JP 2000-77399. That is, the method of making the film in this reference is the same as the method in claim 1. Thus properties inherently associated with the resulting film of the claimed method will likewise be inherently associated with the teachings in the prior art.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-77399, as interpreted by the English language equivalent Yamada et al. and a machine generated English language translation.

This reference does not specifically teach a water content with respect to the amount of solvent. In Yamada et al. patentees teach on column 24, lines 26 and on a mixture of water and organic solvent. Adjusting the amount of water per amount of solvent would have been well within the skill of the ordinary artisan as one must control the amount of water used in hydrolysis and the viscosity of

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the final coating solution. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (i.e. does not require undue experimentation).

7. The Examiner is currently trying to obtain a better translation of JP 2000-77399.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
10/13/05